



UNION CARBIDE CORPORATION

NUCLEAR DIVISION

P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

cc: H. H. Abee
R. C. Baker
M. Sanders
I. G. Speas
S. S. Stief
E. J. Witkowski

November 1, 1974

United States Atomic Energy Commission
Attention: Mr. William H. Travis, Director
Safety & Environmental Control Division
Post Office Box E
Oak Ridge, Tennessee 37830

Gentlemen:

Environmental PCB Concentrations

In the 1973 Environmental Management Appraisals of UCC-ND-operated facilities, a recommendation was made to perform a baseline environmental sampling program for polychlorinated biphenyls (PCB's). This work has been completed and the attached results are tabulated for your information and review. Analyses indicated the PCB to be predominantly Aroclor No. 1248.

We will be happy to discuss the sampling program and resulting data with you or members of your staff as needed.

Very truly yours,


R. G. Jordan, Manager
Safety and Environmental Protection

RGJ:ayb

Attachment

cc: P. C. Fourney
R. F. Hibbs
C. J. Parks - 4
H. Postma
P. R. Vanstrum - 3

Publicly Releasable

This document has received the necessary patent and technical information reviews and can be distributed without limitation.

Baseline Concentrations of PCB's

Oak Ridge Area

<u>Location</u>	<u>Concentration</u> <u>µg/g</u>
New Hope Pond (12 samples)	38 avg.
New Hope Pond Outfall (22 water samples)	< 0.0005 µg/l avg.
Sludge Pond Y-12 (3 samples)	137 avg.
East Fork Poplar Creek	
Below Outfall New Hope Pond	0.1
Near Bear Creek Road	0.1
Near Gamble Valley Road	0.2
Near Howard's	0.1
Near Tennis Courts (top layer)	0.6
Near Tennis Courts (bottom layer)	0.2
Turnpike West of Gallaher Cemetery	0.1
Halfway between Turnpike and Blair Road	0.3
Near Blair Road	0.2
Poplar Creek (East Fork near K-25)	8
Poplar Creek near K-33 Cooling Tower	12
Poplar Creek near Mouth	6
Poplar Creek near K-1203 Sewage Plant	14
Poplar Creek near K-1410	12
Poplar Creek near K-1131 Condensate Line	15
Poplar Creek near K-1407-B Outfall	9
K-901-A Lagoon near Weir	24
K-1407-C Sludge Lagoon near Middle	25
K-1007-B Pond	0.4
K-1001-B Pond	< 0.1
Spring (background)	0.1
Clinch River near Grubb Island	< 0.1
Clinch River, Right Side of Grubb Island	< 0.1
Grubb Island (submerged vegetation)	< 0.1
Melton Hill Dam Swimming Area	< 0.1
Melton Hill Dam near Danger Buoy	< 0.1
White Oak Creek, 0.3 mi. above mouth	2.0
White Oak Creek, 0.3 mi. above mouth (rocky)	< 0.1
Scarboro Embayment, 1A	0.1
Scarboro Embayment, 1B	0.2

Note: All samples are sediment samples except as noted.

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Location

Concentration
ug/g

Below C-340, Upstream of Little Bayou Creek
Sample Point #17, Little Bayou Creek
Surface Runoff Ditch below C-746 Scrapyard
Diversion Ditch
Sample Point #3, Big Bayou Creek
Big Bayou Creek at the "New Bridge"
Little Bayou Creek above Diversion Ditch

4.4
< 1
< 1
14.3
< 1
< 1
< 1

Note: All samples are sediment samples.

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